

Appl. No. 09/852,889  
Atty. Docket No. 8550  
Amdt. dated March 29, 2004  
Reply to Final Office Action of January 27, 2004  
Customer No. 27752

#### AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

##### Listing of Claims:

**Claim 1 (currently amended):** An environmentally degradable, highly attenuated fiber produced by melt spinning a composition comprising:

- a. destructurized starch,
- b. a biodegradable thermoplastic polymer having a molecular weight of less than ~~500,000~~ 400,000 g/mol; and
- c. a plasticizer

**Claim 2 (original):** The highly attenuated fiber of Claim 1 wherein the destructurized starch is present in an amount of from about 5% to about 85%.

**Claim 3 (original):** The highly attenuated fiber of Claim 1 wherein the biodegradable thermoplastic polymer is present in an amount of from about 5% to about 90%.

**Claim 4 (original):** The highly attenuated fiber of Claim 1 wherein the total plasticizer amount is from about 2% to about 70%.

**Claim 5 (original):** The highly attenuated fiber of Claim 1 wherein more than one biodegradable thermoplastic polymer is present.

**Claim 6 (original):** The highly attenuated fiber of Claim 1 wherein the biodegradable thermoplastic polymer is a homopolymer or copolymer of crystallizable polylactic acid having a melting temperature of from about 160°C to about 175°C.

**Claim 7 (original):** The highly attenuated fiber of Claim 5 wherein the first biodegradable thermoplastic polymer is a homopolymer or copolymer of crystallizable polylactic acid having a melting temperature of from about 160°C to about 175°C and the second biodegradable thermoplastic polymer is another polylactic acid having lower crystallinity and melting temperature than the first polylactic acid.

Appl. No. 09/852,889  
Atty. Docket No. 8550  
Amdt. dated March 29, 2004  
Reply to Final Office Action of January 27, 2004  
Customer No. 27752

Claim 8 (original): The highly attenuated fiber of Claim 6 wherein a second biodegradable thermoplastic polymer is selected from a group consisting of diacid/diol aliphatic polyesters, aliphatic/aromatic copolyesters, and combinations thereof.

Claim 9 (original): The highly attenuated fiber of Claim 1 wherein the fiber has a diameter of less than 200 micrometers.

Claim 10 (original): The highly attenuated fiber of Claim 1 wherein the starch is not substituted and has a reduced molecular weight of from about 30,000 g/mol to about 500,000 g/mol.

Claim 11 (original): The highly attenuated fiber of Claim 1 wherein the fiber is thermally bondable.

Claim 12 (withdrawn): A nonwoven web comprising the highly attenuated fibers of Claim 11.

Claim 13 (withdrawn): A nonwoven web wherein the highly attenuated fibers of Claim 11 are blended with other synthetic or natural fibers and bonded together.

Claim 14 (withdrawn): A disposable article comprising the nonwoven web of Claim 12.

Claim 15 (currently amended): An environmentally degradable, highly attenuated fiber produced by melt spinning a composition comprising:

- a. from about 5% to about 80% of destructureized starch,
  - b. from about 15% to about 90% of a biodegradable thermoplastic polymer having a molecular weight of from about 5,000 g/mol to about ~~500,000~~ 400,000 g/mol, and
  - c. from about 2% to about 70% of a plasticizer,
- wherein thermoplastic polymer microfibrils are formed within the starch matrix in the environmentally degradable, highly attenuated fiber.

Claim 16 (original): The highly attenuated fiber of Claim 15 wherein the thermoplastic polymer microfibrils have a diameter of from about 0.01 micrometers to about 10 micrometers. wherein the diameter of the finely attenuated fiber is less than about 200 micrometers.

Claim 17 (original): The highly attenuated fiber of Claim 16 wherein the diameter of the finely attenuated fiber is less than about 200 micrometers.

Appl. No. 09/852,889  
Atty. Docket No. 8550  
Amdt. dated March 29, 2004  
Reply to Final Office Action of January 27, 2004  
Customer No. 27752

Claim 18 (original): The highly attenuated fiber of Claim 15 wherein more than one biodegradable thermoplastic polymer is present.

Claim 19 (original): The highly attenuated fiber of Claim 16 wherein the biodegradable thermoplastic polymer is a homopolymer or copolymer of crystallizable polylactic acid having a melting temperature of from about 160°C to about 175°C.

Claim 20 (original): The highly attenuated fiber of Claim 18 wherein the first biodegradable thermoplastic polymer is a homopolymer or copolymer of crystallizable polylactic acid having a melting temperature of from about 160°C to about 175°C and the second biodegradable thermoplastic polymer is another polylactic acid having a lower melting temperature and crystallinity than the first polylactic acid.

Claim 21 (original): The highly attenuated fiber of Claim 19 wherein a second biodegradable thermoplastic polymer is selected from a group consisting of diacid/diol aliphatic polyesters, aliphatic/aromatic copolyesters, and combinations thereof.

Claim 22 (withdrawn): A nonwoven web comprising environmentally degradable, highly attenuated fibers comprising destructure starch, a biodegradable thermoplastic polymer having a molecular weight of from about 5,000 g/mol to about 500,000 g/mol, and a plasticizer.

Claim 23 (withdrawn): A nonwoven web wherein the highly attenuated fibers of Claim 22 are blended with other synthetic or natural fibers and bonded together.

Claim 24 (withdrawn): A disposable article comprising the nonwoven web of Claim 22.